Vapor Workgroup Meeting #4, August 5, 2010 1:00 – 4:00 pm, Ecology HQ Room S-23

# Meeting Summary

Attending: in person – Dave Bradley (Ecy); Chris Waldron (Pioneer); Paul Webber (ERI); Anna Schmidt (Ecy); Craig McCormack (Ecy); Martha Hankins (Ecy); Pete Kmet (Ecy) and via phone – Craig Rankine (Ecy); Mike Ehlebracht (Hart Crowser); Priscilla Tomlinson (Integral); Rick Wadsworth (Parametrix); Patty Boyden (Port of Vancouver); Elizabeth Allen (EPA).

## Announcements

- Summary of state vapor intrusion requirements brief discussion of a material distributed via email to group members by John Wakeman. This is a list of what states have VI guidance and includes a very brief summary.
- Martha mentioned upcoming meetings of interest: MTCA/SMS Advisory Group meetings in the fall but dates have not been set. Science Panel August 25.

### Status report

Dave Bradley provided a brief recap of where Ecology is in terms of rule issues, discussions, and drafting. In particular, he asked if workgroup members will be willing to review further the risk issues as they move into rule language. This includes screening and air cleanup levels.

# Discussion of Draft Rule Language

Ecology asked for additional input and discussed ways of addressing the questions/issues that people have raised. Pete reviewed comments received to date. Discussion centered on a number of areas:

- Recommended that Ecology clarify what it means for contamination to be "suspected" and how or where does this fit into the RI/FS timeline?
- When is it appropriate and/or necessary to go to indoor air sampling?
- The tiered approach and when the various off-ramps apply.
- Agreement that the rule should have flexibility to address site specific situations
- How to get an off ramp for contaminated soil
- Adding requirements for multiple lines of evidence to rule language
- Considerably complexities for evaluating this pathway make regulatory language challenging
- Add to CLARC an identification of what chemicals are considered volatile
- Utilities corridors and how they affect the 100 foot rule.
- Petroleum degrades if sufficient oxygen is present; not clear how to address this in rule. More
  discussion needed. One concern is how to identify if sufficient oxygen is present underneath a
  large building.
- Establishing how to get to NFA; discussion of a hierarchy of data

## Input regarding specific rule sections

### Section 3510

- Make it clear can go to any Tier/option. Don't have to follow sequentially. Allow flexibility, similar to TFF.
- Add discussion of multiple lines of evidence concept.
- Connect (3) to RI. Delete "suspected"
- Add references, where possible, with understanding of limitations.

#### Section 3511

- Fix definition of volatile and toxic substances. General agreement shouldn't include SVOC's like cPAHs and PCBs unless very high conc. present.
- Concerns expressed about "utilities" expanding scope of investigation unnecessarily. Should distinguish between ones that are potentially problematic and those that aren't. i.e. granular backfill with less permeable cover soil. Check WI guidance on utilities that's referenced in VI guidance.

#### Section 3512

- Discussion of whether an additional factor of 10 for petroleum compounds should be added to account for biodegradation. EPA expressed concerns using this presumption given variability under a building. Chris W. was going to find article on nitrogen injection under a building.
- Discussed using screening levels as single line of evidence. Agreement this seemed to be OK.
- Discussed whether ground water screening levels or soil gas can individually kick out a site or does it need to be both or a sequence. Pete agreed to examine relationship between these.
- Use of models—need to add discussion on limits of use from guidance.
- Discussed merits of adding a conservative soil screening level so all sites don't need to do soil gas measurements. Perhaps based on groundwater screening levels and 3-phase model? Pete will explore.
- Should we add commercial property screening levels?

#### Section 3513

- Information requirements needs to refer to 3512, not 3510.
- (3) should be reformatted to incorporate multiple lines of evidence concept.

Written comments helpful before next meeting.

Pete summarized by saying that the challenge is that this section of the rule, dealing with vapor intrusion, is different fundamentally than other sections of the MTCA rule. The criteria for concluding that no further action is needed won't be as definitive or specific. This may mean more regulatory discretion than in other situations; the challenge is to provide certainty for PLPs, the public, etc for situations where multiple lines of evidence are needed to determine compliance, and those multiple lines of evidence may be confounded by considerable complexity.

# Issues to discuss at the next meeting/potential additional vapor rule issues:

- Multiple lines of evidence
- How to apply standards to workplace environments where chemicals are used and relationship to OSHA/WISHA
- Institutional controls
- Interim action trigger criteria

- Ambient air background
- Section 708 toxicity hierarchy

# **Next Steps**

At least two more meetings will be needed to work through these issues and refine draft rule language. The next meeting will tentatively be the week of August 30.